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Filed: July 25, 2003  
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Examiner: Minh A  
Art Unit: 2821

### Remarks

Claims 1-25 remain in the application without amendment. Applicant respectfully requests further examination and consideration in light of the following remarks.

### Rejections under 35 U.S.C. § 102

Claims 1, 10, and 20 -23 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,402,134 to Miller et al. The rejections are respectfully traversed.

The claimed invention is not anticipated under §102 unless each and every element of the claimed invention is found in the prior art. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986).

The Miller et al. '134 patent discloses a flat plate antenna module with one or more antenna loops arranged on a substrate. It does not disclose, or teach, or suggest a probe, coplanar with a loop and connected to a first conductor section of the loop, and of sufficient length to effectively enhance AM reception in the loop. Indeed, the Miller et al. '134 patent discloses a loop (125) of the type described in the present claim 1. What it does not disclose is a probe of the type described in claim 1.

The Examiner does not identify what aspect of the Miller et al. '134 disclosure constitutes a probe in claims 1, 10 and 20. With respect to claims 21-23, what the Examiner refers to as first and second probes (117, 118 – see page 3 of the office action) are identified in Miller et al. '134 as connector points. Connector point 117 attaches the CB antenna loop 115 to the electrical cable 131 through the substrate 110 (Miller et al. col. 4, ll. 3-6); connector points 118 connect the conductor sections of the AM/FM antenna loop 125 to the antenna feed line 132 through the substrate 110 (Miller et al. '134, col. 4, ll. 17-21). What the Examiner refers to as a coiled probe (116) is actually a loading coil on the CB loop 115 in Miller et al. '134 (col. 4, ll. 6-11).

Miller et al. '134 does not disclose a probe connected to the AM/FM loop to enhance AM reception in the loop (claims 1 and 20), nor does it disclose a connection of the probe near the antenna feed line connector (claim 10). The patent also does not

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disclose a coiled probe coplanar with and within the angle formed by first and second probes, all connected to the single feed point (claim 21). The loop 115 in Fig. 2 of Miller et al. '134 is a CB loop, not connected to the AM/FM loop 125.

Because these elements of the claims are not found in Miller et al. '134, the patent does not anticipate the claims. Moreover, because there is no teaching, suggestion, or motivation for adding such a probe to the antenna arrangement disclosed in Miller et al. '134, the claims are patentable over the cited reference.

### **Rejections under 35 U.S.C. § 103**

Claim 24-25 stand rejected under 35 U.S.C. §103 (a) as being unpatentable over Miller et al. '134. The rejection is respectfully traversed.

Claims 24 and 25 depend directly or indirectly from claim 21 and therefore are patentable for the same reasons that claim 21 is patentable. Applicants concede that it is within the ordinary skill of the art to ascertain the length of an antenna needed to receive signals in a predetermined frequency range. But it is clearly more than a simple design choice to select three separate probes, all mounted coplanar on a substrate and connected to a single feed point, each probe being selected to resonate at a different frequency. All are limitations found in claims 24 and 25, and not taught or suggested by Miller et al. '134.

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### Conclusion

Applicants appreciate the Examiner's determination of the allowability of claims 2-9 and 11-18. But in the absence of any other cited art, it is believed that all of the claims are allowable and early notice of Allowability is respectfully requested. Any questions concerning the foregoing may be directed to the undersigned at 616-742-3513 or ([jeb@mcgarrybair.com](mailto:jeb@mcgarrybair.com)).

Respectfully submitted,  
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Dated: 28 Dec 2004

By: \_\_\_\_\_

  
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